

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Aquatic Resources
Honolulu, Hawaii 96813

June 23, 2011

Board of Land and Natural Resources
Honolulu, Hawaii

Re: Request for Approval of Special Activity Permit 2011-90

Applicant: Mr. Levi Lewis,
Scripps Institution of Oceanography

Project: Research on Water Quality Effects on Coral Colonization and Accretion
within the Kahekili Herbivore Fisheries Management Area and seven
other sites off Maui

The applicant proposes to conduct an underwater study of the effects of water quality on coral colonization and accretion at eight sites off Maui, one of which is within the Kahekili Herbivore Fisheries Management Area. The study involves the placement of a total of 160, 4-in² settlement tiles known as Calcification/Accretion Units or CAUs) on the bottom and periodically removing the tiles to study settlement rates. NOAA currently uses the CAUS in the Tropical Pacific to assess carbonate accretion on reefs.

The attached Permit includes both general conditions and special conditions to guide and condition the work in accordance with practices established by the Division of Aquatic Resources – Maui to protect marine resources.

The Department reviewed the scope and potential impact of the proposed project on the environment and concludes that it will have minimal or no adverse impacts. Consequently, the Department has determined that the proposed activities are exempt from the requirement to prepare an environmental assessment (under Haw. Rev. Stat. §§343-5 and -6, and HAR §11-200-8). An Exemption determination is attached.

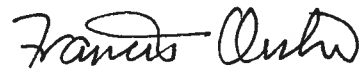
RECOMMENDATION:

Based on the Department's exemption determination (attached) and the application and record in this matter, the Board DECLARES, FINDS, and DECIDES :

- 1) That the actions covered by the Permit will have little or no significant adverse effect on the environment.
- 2) Pursuant to the Department's analysis, the Board concurs with the Director and Chairperson's determination that the activities covered by the Permit are exempt actions under HRS §§ 343-5 and -6 and HAR § 11-200-8.

- 3) That based on the Application, the record in this matter, and the analysis presented, the Board authorizes and approves the proposed Special Activity Permit for the Applicant, subject to the general and special conditions in the Permit and provided the Applicant complies with all other federal, state, and county laws.

Respectfully submitted,

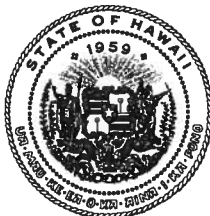


FRANCIS OISHI
Program Manager

APPROVED FOR SUBMITTAL:



WILLIAM J. AILA, JR.
Chairperson



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF AQUATIC RESOURCES
1151 PUNCHBOWL STREET, ROOM 330
HONOLULU, HAWAII 96813

June 23, 2011

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY KAULUKUKUI
INTERIM FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

To: Division of Aquatic Resources File

Through William J. Aila, Jr., Chairperson

From: Robert Nishimoto, Aquatic Biologist *JO for RN*
Division of Aquatic Resources

Re: Special Activity Permit to Levi Lewis.
For Research on Water Quality Effects on Coral Colonization and Accretion
within the Kahekili Herbivore Fisheries Management Area and seven other sites
off Maui.

Declaration of Exemption from the Preparation of Environmental Assessment,
Hawaii Revised Statutes, §§343-5 and -6; HAR §11-200-8

The following permitted activities are determined to be exempt from the requirement to prepare an Environmental Assessment pursuant to Hawaii Revised Statutes, §§343-5 and -6; HAR §11-200-8.

Project Title: Special Activity Permit to Mr. Levi Lewis, Scripps Institution of Oceanography, for use of State submerged lands to place tiles on the bottom to study coral accretion within the Kahekili Herbivore Fisheries Management Area and seven other sites off Maui.

Permit Number: SAP 2011-90.

Project Description: Special Activity Permit authorizes the use of state submerged lands to place tiles on the bottom to study coral accretion from June 23, 2011 through June 22, 2012. The placement of settlement tiles on the bottom is a use of State submerged lands that requires a permit.

The study involves the placing of a total of 160, 4-in² settlement tiles, known as Calcification/Accretion Units or CAUs, bolted with a ¼ inch pin to the bottom and periodically removing the tiles to study settlement rates. NOAA currently uses the CAUS in the Tropical Pacific to assess carbonate accretion on reefs.

CAUs may be deployed in State marine waters at paired sites within each of the following four regions off Maui: southwest (Olowalu & Kahekili Herbivore FMA), south-central (Maalea & Ukumehame), southeast (Kalama Park & La Perouse Bay), and north-central (Kahului & Paia).

The DAR Maui staff is being consulted in this study. All equipment will be removed by the permit's expiration, unless determined by DAR – Maui that the pins should remain in place or extended by another permit.

Consulted Parties: Russell Sparks, DAR - Maui

Exemption Determination: After reviewing HAR §11-200-8 exemptions and significance under HAR § 11-200-2, DLNR concludes that the activities under this Permit will have minimal or no significant effect on the environment and that issuance of the Permit is categorically exempt from the requirement to prepare an environmental assessment for the reasons set forth below:

1. All activities associated with this permit have been evaluated as a single action.

Since this permit involves the use of the same methodology repeated at the various study sites, throughout the permit period, the categorical exemption determination treats all planned activities as a single action. HAR §11-200-7.

2. 2. The Exemption Class for Scientific Research with no Serious or Major Environmental Disturbance Appears to Apply. § 11-200-8(a)(5), HAR, exempts the class of actions that involve “basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource.” This exemption class has been interpreted to include the research on animals, such as those being proposed.

In addition, the activities under consideration are exempt under Exemption Class #5, Exempt Items #4, and #5, respectively, which include “wildlife and game surveys, censuses, inventories, studies...” and “...marine surveys and research activities....” Department of Land and Natural Resources, Exemption List for the Division of Fish and Game, approved January 19, 1976.

The proposed activities here appear to fall squarely under the exemption class identified under §11-200-8(a)(5), HAR. As discussed below, the temporary use of State submerged lands will cause no significant disturbance to any environmental resource. Therefore, the proposed actions are exempt from the requirement to prepare an Environmental Assessment.

3. Cumulative Impacts of Actions in the Same Place and Impacts with Respect to the Environment Will Not be Significant.

Even if a categorical exemption covers a proposed action, the action is not exempt if “the cumulative impact of planned successive actions in the same place, over time, is significant, or when an action that is normally insignificant in its impact on the environment may be significant in a particularly sensitive environment.” HAR §11-200-8(b). To gauge whether a significant impact or effect is probable, an exempting agency must consider every phase of a proposed action, any expected primary and secondary consequences, the long-term and short-term effects of the action, the overall and cumulative effect of the action, and the sum effects of an action on the quality of the environment. HAR §11-200-12.

No significant cumulative impacts are anticipated as a result of this activity. Numerous safeguards will ensure that the environment will not be significantly affected. All activities will be conducted in a manner that protects and does not diminish marine resources, qualities, and ecological integrity, or have any indirect, secondary, cultural, or cumulative effects.

Since no significant cumulative impacts or significant impacts are anticipated, the categorical exemptions identified above apply.

4. Overall Impacts Will Probably have a Minimal or No Significant Effect on the Environment.

Any foreseeable impacts from the proposed activity will probably be minimal, and further mitigated by general and specific conditions attached to the Permit. Specifically, all activities covered by this Permit will be carried out with strict safeguards (see attached permit) for the natural, historic, and cultural resources of the area.

CONCLUSION.

After reviewing the historical and factual situation on this matter, the general and special terms of the Permit, and the potential benefits and impacts of the proposed activities, as provided under HRS §§ 343-5 and 6, HAR §11-200-8, it is hereby determined that that the project will probably have minimal or no significant effect on the environment.

Therefore, the Department determines that this project is exempt from the requirement to prepare an Environmental Assessment under HRS chapter 343.

William J. Aila, Jr.
Director,
Department of Land and Natural Resources
and Chairperson,
Board of Land and Natural Resources

Date

SPECIAL
ACTIVITY PERMIT SAP 2011-90

State of Hawai'i
Department of Land & Natural Resources
Division of Aquatic Resources
1151 Punchbowl Street, Room 330
Honolulu, Hawai'i 96813

Issued June 23, 2011

Expires June 22, 2012

The Board of Land and Natural Resources hereby grants permission for certain collection of organisms belonging to the people of Hawai'i under the authority of Section 187A-6, Hawai'i Revised Statutes, and all other applicable laws, to:

Mr. Levi Lewis (permittee)
Scripps Institution of Oceanography
9500 Gilman Dr. MC0208
La Jolla, CA 92093

(707) 338-445

This permit is issued with attached conditions to authorize take of the marine algae listed below, for scientific studies on marine coral rates of colonization and accretion at eight sites off Maui. The study would involve the placement of settlement tiles on the bottom to study accretion rates. This permit authorizes the use of State submerged lands for the purpose of tile placement at designated underwater sites.

This permit, signed by authorized representative of the Department of Land and Natural Resources (the Department), authorizes the permittee, and assistants designated on the final page(s) of, or attachments to, this permit, to engage in activities otherwise prohibited by law, subject to the conditions, which **TAKE, CATCH, POSSESS, TRANSPORT, OR KILL** certain aquatic life from waters of the State, as follows:

CONDITIONS

PART I. GENERAL

A. This permit becomes effective when the following process is completed.

1. Each assistant must be listed at the end of this permit.
2. The permittee and each assistant must read the permit completely; and must acknowledge understanding of and agreement to abide by conditions of the permit, by signing *both* copies of the permit in the spaces provided.
3. *Both* copies of the permit with permittee's and assistants' signatures must be returned to the Division of Aquatic Resources (the Division).
4. **The permit becomes valid when signed by an authorized representative of the Department;** the Department will return one validated copy to the permittee.

5. The permittee agrees to notify the Division immediately of any change in assistants. Additional persons may be added as assistants by validation: each must sign an "Attachment" form, which must be returned to the Division for validation; once approved, such persons are added to the permit.
- B. The permittee agrees to obtain written approval of the Division prior to conducting any activity that is prohibited under the permit (i.e. request in advance changes to permit conditions).
- C. This permit does not make the Board of Land and Natural Resources or State of Hawai'i liable in any way for claim of personal injury or property damage which may result from activity authorized by this permit; the permittee and all assistants agree to hold the Board and State harmless against any and all claims of injury, death or damage resulting from actions or omissions under this permit.
- D. This permit conveys authority **ONLY** of the Department relating to the Division's jurisdiction over aquatic resources: the permittee remains responsible for obtaining all other prior permission from other applicable authorities (such as owners of and tenants upon private lands; other divisions of the Department; other local, State and Federal agencies--this permit authorizes collecting organisms protected by Federal law only with appropriate Federal authorization).
- E. The permittee and also each assistant is individually responsible and accountable for his or her actions while performing activities authorized by this permit; the permittee is additionally responsible and accountable for the actions of each assistant.
- F. This permit is neither transferrable nor assignable to another person.
- G. The permittee or assistant must carry a copy of this permit on location while performing activities authorized by this permit.
- H. Authority granted by this permit ends on the "Expiration Date" on the first page of this permit; within **one month** of the expiration date, the permittee agrees to **return this permit** to the Division **with a Collecting Report completed for the full duration of this permit**, reporting results of *all* collecting under this permit on the form provided with this permit.
- I. The permittee and assistants agree to provide access to data obtained under this permit upon request of the Division, to provide the Division one copy of each report prepared with such data and published for distribution, and to allow Department staff to inspect on permittee's premises organisms collected under this permit.
- J. Violation of any condition of this permit by any person may be cause for immediate revocation of the permit; the person responsible may be subject to penalty as provided by law; violation may be cause also for denial of future permit applications.
- K. The permittee may request change of a condition or conditions of this permit by writing to the Division; if approved by the Department, the Division will issue an attachment ("Amendment") that shall become part of, and amend terms of, this permit. The Department may impose additional conditions to, or restrictions of, this permit by written notice to the permittee.

PART II. SPECIAL CONDITIONS

1. **GENERAL STATEMENT:** This permit authorizes the use of State submerged lands for the temporary placement of settlement tiles known as Calcification/Accretion Units or CAUs bolted in place with pins to the bottom to study the rate that marine organisms settle on the tiles, subject to the direction of DAR – Maui and other conditions of this permit. CAUs will be installed away from live coral, and only the 1/4 in. pin will contact the limestone substrate. Up to 20, 4" x 4" CAUs at each of eight sites, totaling 160 tiles are authorized. All equipment will be removed by the permit's expiration, unless determined by DAR – Maui that the pins should remain in place or extended by another permit.
2. **LOCATIONS:** CAUs may be deployed in State marine waters at paired sites within each of the following four regions off Maui: southwest (Olowalu & Kahekili Herbivore FMA), south-central (Maalea & Ukumehame), southeast (Kalama Park & La Perouse Bay), and north-central (Kahului & Paia) and is expressly prohibited at the following locations or other marine areas where such take is prohibited.

<u>ISLAND OF MAUI</u>	<u>ISLAND OF O'AHU</u>	<u>ISLAND OF HAWAI'I</u>
Kahului Harbor FMA ¹ Honolua-Mokuleia MLCD ² Molokini MLCD Ahihi-Kinau NAR ³	Ala Wai Canal FMA Coconut Island MLR Diamond Head SFMA Haleiwa Harbor FMA Hanauma Bay MLCD Heeiea Kea FMA Kapalama Canal FMA Paiko Lagoon Wildlife Refuge Pupukea MLCD Waialua Bay FMA Waikiki MLCD	Hilo Bay FMA Kealahakua Bay MLCD Kailua Bay FMA Kawiahae Harbor FMA Old Kona Airport MLCD Lapakahi Bay MLCD Puako FMA Waiakea PFA ⁴ Wailea Bay MLCD Wailuku River FMA Wailoa River FMA Waiopae Tidepools MLCD West Hawaii Regional Fishery Management Area (comprising 9 Fish Replenishment Areas)
<u>ISLAND OF LANA'I</u> Manele Harbor FMA Manele-Hulopoe MLCD		
<u>ISLAND OF MOLOKA'I</u> Kaunakakai Harbor FMA		
<u>ISLAND OF KAUAI</u> Ahukini Pier FMA Hanamaulu Bay FMA Kapaa Canal FMA Waikaena Canal FMA Waimea Pier & Bay FMA		

¹ FMA -Fisheries Management Area; ² MLCD - Marine Life Conservation District; ³ NAR - Natural Area Reserve; ⁴ PFA - Public Fishing Area

3. **COLLECTING PRACTICES:** The permittee is responsible for persons engaging in activities under this permit behaving professionally and responsibly, in a manner which does not generate conflict with public or private sectors, including fishing and dive-tour industries and local communities.
- a. Collecting activities under authority of this permit must be supervised directly, on site, by either the permittee or a designated assistant (who must be a signatory of this permit). While taking samples, the permittee agrees not to purposely take rock substrate and to the extent practical will avoid taking rock substrate.
 - b. The permittee will follow alien species management protocols and take all reasonable steps to ensure the individuals listed on this permit do NOT serve as vectors for the transport or more importantly introduction of alien or invasive species through their activities. The introduction of an alien or invasive species into an area where it currently does not exist would be a violation of this provision.
 - c. **Large Colonies:** No extractive or invasive sampling will be done on, or near, any intact coral colony measuring larger than 1 m x 1 m x 1 m. Specific efforts will be made to avoid damage to any large colonies of coral.
 - d. Except as specified expressly in an approved collecting plan, no organism unlawful for taking or possession by reason of size, under law or administrative rule, may be collected or utilized under this permit.
 - e. No live stony coral species will be collected or impacted by any activities conducted under this permit.
 - f. The Division may require the permittee to accommodate presence of an observer specified by the Division during collection and research activities. A record will be kept of each collection comprising specific location, date, species and amount collected. This record will be made available to the Division upon request.
4. **NOTICE:**
- a. Collecting generally - the permittee must give notice, in form specified by the Department, to DAR neighbor island offices *and* to the neighbor island office of the Department's Division of Conservation and Resources Enforcement (DOCARE), at least 2 hours prior to initial commencement of any collection activity under this permit targeting coral or live rock.
 - b. Mass mortality - the permittee must notify DAR O'ahu within one day of
 - 1) Any instance of major damage caused to coral or other marine natural resources as a result of collection or other research activities conducted under this permit.
 - 2) Mass die-off, disease, or health problems occurring with organisms kept alive that were collected under this permit.
 - c. Fragmentation - This permit does not authorize the take of live coral.
5. **GEAR AND METHODS**
- Use of any chemical substances** pursuant to Section 188-23, Hawai'i Revised Statutes, **electrical shocking devices, or explosives remains expressly prohibited.**

6. **USE OF ORGANISMS:** Organisms and live rock taken from Hawai'i waters under authority of this permit may be used only for scientific study or educational purposes, except as authorized by prior written approval of the Division:
 - a. Organisms collected under authority of this permit may not be used for personal consumption or sale; organisms collected under this permit may not be traded, bartered or loaned to other individuals, institutions or entities;
 - b. Written approval must be obtained from the Division prior to
 - 1) Purchasing or any other acquisition of regulated organisms (regardless of origin) alive from any other party;
 - 2) Transporting any live organism (regulated or not) between islands or out-of-state; and
 - 3) Exchanging or donating any organisms collected under this permit to any other person, party or organization;
 - c. The permittee may not convey in any fashion (including, but not limited to, selling, trading, or giving) any coral or live rock to any person or party in Hawai'i which does not already have a permit from the Department authorizing possession of same and without direct, written approval from the Division;
 - d. The collected samples will be deposited at the Bishop Museum.
7. **ANNUAL REPORT:** Upon expiration, the permittee must provide to the Division a final written report summarizing results of collecting activity carried out under this permit and the analysis of the data:
 - a. The annual report should provide a written explanation as to how the collection of marine species for scientific study is benefiting the State of Hawai'i in general and specifically, the improved management of the species.
 - b. The final report must describe, in form specified by the Department,
 - 1) Names and total numbers/quantities of all specimens collected under this permit,
 - 2) Their dispositions (e.g. on display; released/returned to the ocean; died),
 - 3) **Description of any additional benefits** beyond the scientific analysis provided to the Division or the public during the period; and
 - 4) Before and after photographs of the substrate where the pins were inserted and removed; and
 - 5) A list of the GPS positions of the pin locations.
 - c. An inventory of organisms (dead or alive) present at the facility or with the permittee the end of the report period, in form acceptable to the Division, must accompany the annual report;
 - d. **The annual report is due at the Division's Honolulu office within one calendar month after expiration of the permit, and is required prior to any renewal of this permit.**

VALIDATING SIGNATURE

WILLIAM J. AILA, JR., Chairperson

Board of Land and Natural Resources

cc: (X) DLNR Division of Conservation and Resources Enforcement
(X) DAR - Maui

ACKNOWLEDGING SIGNATURES

By signature below, I attest that I have read and understand the General and Special Conditions of this Special Activity Permit and that, further, I agree to comply with all of these conditions when collecting under authority of this permit.


A handwritten signature in black ink, appearing to read "J3 J2", is written over a horizontal line.

Mr. Levi Lewis

Permittee

Special Activity Permit

Designated Assistants

Sign: 	Sign:
Type Name: Jennifer Smith	Type Name:
Sign:	Sign:
Type Name:	Type Name:
Sign:	Sign:
Type Name:	Type Name:
Sign:	Sign:
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